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A NEW SPECIES OF AGRIOGNATHA (ARANEAE, ARGIOPIDAE) FROM PANAMA

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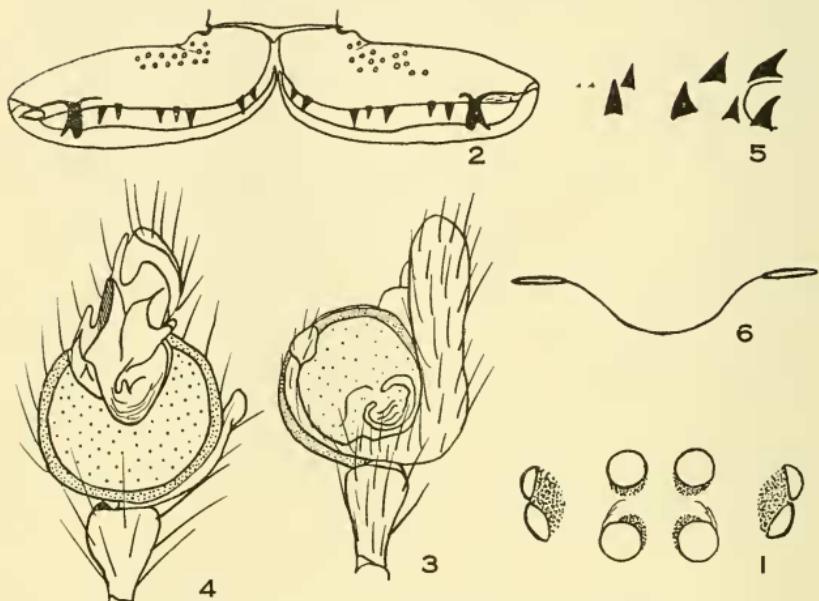
F. P. Cambridge (1903) recognized two species of *Agriognatha* from western Panama and another from Costa Rica although he was in some doubt as to the proper position of the Panamanian *A. lepida* (O. P. Cambridge). To my knowledge, no species of *Agriognatha* from Panama have been recognized since that time. No mention of the genus is made by Kraus (1955) in his recent paper on the spiders of El Salvador.

During my recent studies on the genus *Tetragnatha* Latreille, 1804 in Panama numerous specimens of what I am compelled to regard as a new species of *Agriognatha* O. P. Cambridge, 1896 have been sorted out of my collections. This species is described in accord with my usual procedure, and the types will be deposited in the Museum of Comparative Zoology at Harvard College. A single male of another species from El Volcan, R. P. has also appeared in my material. Unfortunately, this specimen has lost both palpal tarsi and, hence, is regarded as unworthy of a description at the present time. This latter species appears to be close to *A. bella* O. P. Cambridge from Costa Rica.

Genus AGRIOGNATHA O. P. Cambridge, 1896

In a recent paper (1956) describing a new species of *Agriognatha* from Jamaica, B. W. I., I have given reasons for retaining this generic name rather than returning to *Cyrtognatha* as Roewer (1942) has done. In view of the uncertainty regarding the relationship between the genus *Cyrtognatha* Keyserling, 1881

and the genus *Agriognatha* O. P. Cambridge, 1896 I think it is still desirable to retain the name given here.



External Anatomy of *Agriognatha insolita* sp. nov.

Fig. 1. Eye group of male from in front.
 Fig. 2. Chelicerae and cheliceral teeth from in front.
 Figs. 3-4. Male palpal tibia and tarsus; lateral and ventral views, respectively.
 Fig. 5. Female cheliceral teeth.
 Fig. 6. Genital groove of female.

AGRIOGNATHA INSOLITA SP. NOV.

(Figures 1-6)

Male holotype. Total length 5.59 mm. including chelicerae; exclusive of the chelicerae 5.2 mm. Carapace 1.95 mm. long; 1.17 mm. wide opposite interval between second and third coxae where it is widest; considerably narrowed opposite first coxae; median longitudinal thoracic groove well marked.

Eyes. Eight in two rows; viewed from above, both rows recurved with anterior row strongly so; viewed from in front, an-

terior row gently recurved, posterior row gently proeurved, both measured by centers. Central ocular quadrangle slightly wider in front than behind, slightly longer than wide in front. Ratio of eyes AME: ALE: PME: PLE = 11: 10: 10: 9. AME separated from one another by about three-fourths of their diameter, from ALE by slightly less than 1.2 times their diameter. PME separated from one another by about four-fifths of their diameter, from PLE by 1.8 times their diameter. Laterals separated from one another only by a broad line (Fig. 1).

Chelicerae. Very divergent; nearly horizontal. Basal segment 1.625 mm. long and, therefore, about four-fifths as long as the carapace. The fang is moderately sinuous and without special features. Near the base of the fang on the promargin of the fang groove there is a robust bifurcate tooth and three other small teeth more proximal in position; the retromargin has four somewhat larger teeth (Fig. 2).

Maxillae. Nearly parallel; somewhat broadened distally; about three times as long as broad in middle; moderately concave along lateral borders; slightly more than twice as long as lip.

Lip. About as long as wide at base; sternal suture irregularly proeurved; with pronounced sternal tubercles at ends of sternal suture.

Sternum. Essentially cordiform; as wide as long; moderately convex; moderately scalloped opposite each coxa; moderately extended between all coxae with second and third coxae relatively widely separated; continued by a narrow sclerite between fourth coxae which are only slightly separated.

Legs. 1243. Width of first patella at "knee" .264 mm., tibial index of first leg 5. Width of fourth patella at "knee" .214 mm., tibial index of fourth leg 8.

	Femora	Patellae	Tibiae	Metatarsi	Tarsi	Totals
1.	4.420	.910	4.615	5.200	1.365	16.510
2.	3.380	.750	2.762	3.250	.975	11.117
3.	1.625	.410	.975	1.235	.700	4.945
4.	2.730	.520	2.080	2.470	.885	8.685
Palp	.520	.220	.242	—	.770	1.752

(All measurements in millimeters)

With many true spines on all legs. Those which seem to be most distinctive occur as follows. First leg: near the base of the femur on the ventral surface there are three short robust spines in a short row; on the retrolateral surface there is a row of nine or ten spines several of which seem to be modified for some special use with the most distal one long and robust; the metatarsus has a series of about twenty-five short robust ventral spines beginning at the base of the segment and extending through about three-fourths of its length and diminishing in size distally. Second leg: essentially as in first with the special metatarsal spines less marked. The third femur has a row of five conspicuous trichobothria on its prolateral surface in the proximal fourth; the fourth femur has a row of eight similar trichobothria on its prolateral surface in the proximal third.

Palp. Complicated and somewhat difficult to describe because of the presence of numerous transparent tarsal apophyses. It appears to be rather typical of those described by Miss Bryant from Cuba and Hispaniola (1940, 1945). The paracymbium is long and slender with a terminal enlargement (Figs. 3-4).

Abdomen. Unnotched at base dorsally; only slightly extended over the carapace; 3.51 mm. long; .91 mm. wide; nearly uniform in width to the rounded posterior end.

Color in alcohol. Chelicerae reddish brown; elsewhere essentially like that of female except that there are fewer of the silvery spangles on the abdomen.

Female allotype. Total length including chelicerae 8.125 mm.; exclusive of the chelicerae 7.80 mm. Carapace 2.47 mm. long; 1.625 mm. wide opposite interval between second and third coxae where it is widest; with the cephalic region only slightly raised; the shallow thoracic median pit is shaped quite differently from that usually present in the genus *Tetragnatha* and is extended forward in a narrow point.

Eyes. Eight in two rows as usual; with laterals on a rather prominent tubercle; viewed from above, posterior row slightly recurved, anterior row strongly so; viewed from in front, posterior row gently procurved, anterior row moderately recurved; both measured by centers. Central ocular quadrangle only

slightly wider behind than in front; longer than wide behind in ratio of 11: 10. Ratio of eyes AME: ALE: PME: PLE = 10: 9: 10: 8. AME separated from one another by 1.1 of their diameter, from ALE by 2.3 times their diameter. PME separated from one another by 1.2 times their diameter, from PLE by 2.2 times their diameter. ALE separated from PLE by one-fourth of the diameter of PLE (some workers might regard them as being contiguous because the corneas are nearly so, but the margins of the corneal hypodermis are separated as indicated). Height of clypeus equal to .9 of the diameter of AME.

Chelicerae. Moderately well developed; only slightly divergent; basal segment 1.365 mm. long; fang regularly curved, without cusps; fang groove well marked; promargin of fang groove with only three teeth of moderate size plus two minute denticles; retromargin with four teeth also of moderate size but slanted irregularly (Fig. 5).

Maxillae. Slightly divergent, with outer distal corners considerably extended; longer than lip in ratio of about 9: 4; longer than wide in ratio of about 18: 7.

Lip. Only slightly broader at base than long. Sternal suture gently procurved; with pronounced sternal tubercles at lateral ends of suture.

Sternum. Essentially as in male.

Legs. 1243. Width of first patella at "knee" .330 mm., tibial index of first leg 5. Width of fourth patella at "knee" .242 mm., tibial index of fourth leg 8.

	Femora	Patellae	Tibiae	Metatarsi	Tarsi	Totals
1.	4.875	1.105	5.200	5.720	1.592	18.492
2.	3.510	.910	3.250	3.880	1.175	12.725
3.	2.000	.520	.975	1.560	.775	5.830
4.	3.185	.585	2.405	2.730	1.105	10.010

(All measurements in millimeters)

All legs with spines and hairs. The third femur has a row of six prominent trichobothria on its anterior surface in the proximal third of the segment; the fourth femur has a similar row of about fifteen prominent trichobothria.

Abdomen. Only slightly gibbous in anterior half; 5.525 mm. long; only slightly extended posterior to spinnerets; squarely truncate at anterior end; genital groove as shown in Figure 6.

Color in alcohol. Legs: generally yellowish with tibiae and metatarsi darker; irregular black streaks beneath patellae and distal ends of femora; grayish areas are frequent on several segments. Mouth parts are generally light yellowish brown with the fang darkest of all. Sternum light yellowish brown. Carapace light yellowish brown with darker markings. Abdomen: cardiac region very light yellowish; remainder of dorsal and dorsolateral areas light yellowish with many small silvery spangles; mid-ventral area light yellowish with a narrow row of silvery spangles on each side; farther laterally the venter is free of the silvery spangles.

Type locality. Both male holotype and female allotype are from Barro Colorado Island, C. Z., August, 1950. Male and female paratypes are in the collection from: Barro Colorado Island, C. Z., July, 1936; February, 1936 (Gertsch); August, 1939; May, 1946 (T. C. Schneirla); June-August, 1950; July-August, 1954; Arraijan, R. P., August, 1936.

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